

Serial No. 09/749,064

REMARKS

The Office Action has been carefully reviewed in light of the cited references and the Examiner's comments, and accordingly, Applicants are amending claim 85 to clarify Applicants' core panel structure and to distinguish further between Applicants' structure and the core panel structure disclosed in Applicants' prior '082 patent and the insulated hose structure disclosed in Mead '253. Applicants' undersigned attorney also gratefully acknowledges the courteous telephone interview on December 19, 2003 with the Examiner in charge of this application and who has agreed that amended claim 85 is in condition for allowance for the reasons which follow.

An essential function of applicants' layer of fibrous rovings which helically surround each of the elongated strips of low density cellular material is to tie the skins structurally together by extending completely through the core and continuously over the core surfaces thereby significantly improving the attachment of the rovings to the panel skins by substantially increasing the contact area between the rovings and the skins.

In applicant Day's prior patent of Day '082, the web-like layer of porous rovings are wrapped around each foam piece, as shown in FIG. 39 and described in column 19, lines 46-49, but the wrapped strips are rotated 90° with respect to the opposite core surfaces so that only the end portions of the rovings or edges of the webs formed by the rovings are in adhesive contact with the panel skins, as in a honey-comb core sandwich panel construction. Thus the rovings in Day '082 provide a substantially smaller area for resin adhesion between the rovings and the panel skins than does the rovings in the present invention.

In the insulated tubular hose disclosed in Mead et al '253, the fibrous strips 6A, 6B & 6C carry the layers of foam blocks 11 around the inner hose 5 during the helical wrapping or winding of the inner tube or hose 5 with the successive strips

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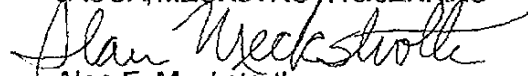
17A, 17 B & 17C to form the layers 7A, 7B & 7C. None of the helically wound fibrous strips 6A, 6B & 6C extend through the foam layers 7A, 7B & 7C to provide for structurally tying the inner tube or hose 5 to the surrounding outer tube or sheath 18. Even if there was a teaching for combining the above references, the hose of Mead '253 does not teach a reconstruction of the panel in Day '082 to arrive at applicants' core panel structure as set forth above in amended claim 85.

In reference to Applicants' unitize core panel which is adapted to be moved as a unit to a molding process, the elongated strips with the helically surrounding rovings are connected together, for example, by an adhesive veil 241 as shown in FIG. 18. This solves the problem set forth in the last paragraph on page 4 and at the top of page 5 of the above application.

In view of Applicants understanding that amended claim 85 is allowable, Applicants believe that dependant claims 87-99, which depend from claim 85, should also be in condition for allowance with claims 22-26, 39, 40, 57-84 and 86. Accordingly, Applicants respectfully request that this application be past to issue.

Respectfully submitted,

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